==========
Sequence Listing was accepted.
If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).
Reviewer: Durreshwar Anjum
Timestamp: [year=2009; month=2; day=3; hr=10; min=59; sec=28; ms=422;]
==========

Validated By CRFValidator v 1.0.3

Application No: 10597926 Version No: 1.0

Input Set:

Output Set:

Started:	2009-01-19 19:17:12.376
Finished:	2009-01-19 19:17:13.112
Elapsed:	0 hr(s) 0 min(s) 0 sec(s) 736 ms
Total Warnings:	0
Total Errors:	0
No. of SeqIDs Defined:	2
Actual SeqID Count:	2

SEQUENCE LISTING

<110> Ensoli, Barbara

<120> Novel Tat Complexes, And Vaccines Comprising Them

<130> 114-06

<140> 10597926
<141> 2009-01-19

<150> PCT/EP2005/003043
<151> 2005-03-11

<150> UK 0405480.5
<151> 2004-03-11

<160> 2

<170> PatentIn version 3.3

<210> 1
<211> 102
<212> PRT
<213> Human immunodeficiency virus type 1

<400> 1

Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
1 5 10 15

Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
20 25 30

His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
35 40 45

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
50 55 60

His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
65 70 75 80

Pro Thr Gly Pro Lys Glu Gln Lys Lys Lys Val Glu Arg Glu Thr Glu
85 90 95

Thr Asp Pro Val His Gln
100

<210> 2
<211> 853
<212> PRT
<213> Human immunodeficiency virus type 1

<220>
<221> misc_feature
<222> (23)..(23)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (84)..(86)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (138)..(139)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (141)..(141)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (143)..(143)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (157)..(157)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (167)..(167)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (190)..(190)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (243)..(243)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (278)..(278)
<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature
<222> (281)..(281)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (286)..(286)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (349)..(349)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (426)..(426)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (674)..(674)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (751)..(751)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (761)..(761)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (795)..(795)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (814)..(815)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (817)..(817)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (830)..(830)
<223> Xaa can be any naturally occurring amino acid

<400> 2

Met Arg Val Thr Glu Ile Arg Lys Ser Tyr Gln His Trp Trp Arg Trp

```
1               5                   10                  15

Gly Ile Met Leu Leu Gly Xaa Leu Met Ile Cys Asn Ala Glu Glu Lys
            20                  25                  30

Leu Trp Val Thr Val Tyr Tyr Gly Val Pro Val Trp Lys Glu Ala Thr
        35                  40                  45

Thr Thr Leu Phe Cys Ala Ser Asp Ala Lys Ala Tyr Asp Thr Glu Val
    50                  55                  60

His Asn Val Trp Ala Thr His Ala Cys Val Pro Thr Asp Pro Asn Pro
65                  70                  75                  80

Gln Glu Val Xaa Xaa Xaa Asn Val Thr Glu Asn Phe Asn Met Trp Lys
                85                  90                  95

Asn Asn Met Val Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp
            100                 105                 110

Gln Ser Leu Lys Pro Cys Val Lys Leu Thr Pro Leu Cys Val Thr Leu
        115                 120                 125

Asn Cys Thr Asp Leu Arg Asn Ala Thr Xaa Xaa Asn Xaa Thr Xaa Thr
    130                 135                 140

Thr Ser Ser Ser Arg Gly Met Val Gly Gly Gly Glu Xaa Lys Asn Cys
145                 150                 155                 160

Ser Phe Asn Ile Thr Thr Xaa Ile Arg Gly Lys Val Gln Lys Glu Tyr
                165                 170                 175

Ala Leu Phe Tyr Glu Leu Asp Ile Val Pro Ile Asp Asn Xaa Ile Asp
            180                 185                 190

Arg Tyr Arg Leu Ile Ser Cys Asn Thr Ser Val Ile Thr Gln Ala Cys
        195                 200                 205

Pro Lys Val Ser Phe Glu Pro Ile Pro Ile His Tyr Cys Ala Pro Ala
    210                 215                 220

Gly Phe Ala Ile Leu Lys Cys Lys Asp Lys Lys Phe Asn Gly Lys Gly
225                 230                 235                 240
```

```
Pro Cys Xaa Asn Val Ser Thr Val Gln Cys Thr His Gly Ile Arg Pro
                245                 250                 255

Val Val Ser Thr Gln Leu Leu Leu Asn Gly Ser Leu Ala Glu Glu Glu
            260                 265                 270

Val Val Ile Arg Ser Xaa Asn Phe Xaa Asx Asn Ala Lys Xaa Ile Ile
        275                 280                 285

Val Gln Leu Asn Glu Ser Val Glu Ile Asn Cys Thr Arg Pro Asn Asn
    290                 295                 300

Asn Thr Arg Lys Ser Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr
305                 310                 315                 320

Thr Gly Glu Ile Ile Gly Asp Ile Arg Gln Ala His Cys Asn Leu Ser
                325                 330                 335

Arg Ala Lys Trp Asn Asp Thr Leu Asn Lys Ile Val Xaa Lys Leu Arg
            340                 345                 350

Glu Gln Phe Gly Asn Lys Thr Ile Val Phe Lys His Ser Ser Gly Gly
        355                 360                 365

Asp Pro Glu Ile Val Thr His Ser Phe Asn Cys Gly Gly Glu Phe Phe
    370                 375                 380

Tyr Cys Asn Ser Thr Gln Leu Phe Asn Ser Thr Trp Asn Val Thr Glu
385                 390                 395                 400

Glu Ser Asn Asn Thr Val Glu Asn Asn Thr Ile Thr Leu Pro Cys Arg
                405                 410                 415

Ile Lys Gln Ile Ile Asn Met Trp Gln Xaa Val Gly Arg Ala Met Tyr
            420                 425                 430

Ala Pro Pro Ile Arg Gly Gln Ile Arg Cys Ser Ser Asn Ile Thr Gly
        435                 440                 445

Leu Leu Leu Thr Arg Asp Gly Gly Pro Glu Asp Asn Lys Thr Glu Val
    450                 455                 460
```

```
Phe Arg Pro Gly Gly Gly Asp Met Arg Asp Asn Trp Arg Ser Glu Leu
465                 470                 475                 480

Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr
                485                 490                 495

Lys Ala Lys Arg Arg Val Val Gln Arg Glu Lys Arg Ala Val Gly Ile
            500                 505                 510

Gly Ala Val Phe Leu Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly
        515                 520                 525

Ala Ala Ser Met Thr Leu Thr Val Gln Ala Arg Leu Leu Leu Ser Gly
    530                 535                 540

Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln
545                 550                 555                 560

His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg
                565                 570                 575

Val Leu Ala Val Glu Arg Tyr Leu Arg Asp Gln Gln Leu Leu Gly Ile
            580                 585                 590

Trp Gly Cys Ser Gly Lys Leu Ile Cys Thr Thr Ala Val Pro Trp Asn
        595                 600                 605

Ala Ser Trp Ser Asn Lys Ser Leu Asn Lys Ile Trp Asp Asn Met Thr
    610                 615                 620

Trp Met Glu Trp Asp Arg Glu Ile Asn Asn Tyr Thr Ser Ile Ile Tyr
625                 630                 635                 640

Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
                645                 650                 655

Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile
            660                 665                 670

Thr Xaa Trp Leu Trp Tyr Ile Lys Ile Phe Ile Met Ile Val Gly Gly
        675                 680                 685
```

```
Leu Ile Gly Leu Arg Ile Val Phe Ser Val Leu Ser Ile Val Asn Arg
    690                 695                 700

Val Arg Gln Gly Tyr Ser Pro Leu Ser Phe Gln Thr His Leu Pro Ala
705                 710                 715                 720

Ser Arg Gly Pro Asp Arg Pro Gly Gly Ile Glu Glu Glu Gly Gly Glu
                725                 730                 735

Arg Asp Arg Asp Arg Ser Gly Pro Leu Val Asn Gly Phe Leu Xaa Leu
            740                 745                 750

Ile Trp Val Asp Leu Arg Ser Leu Xaa Leu Phe Ser Tyr His Arg Leu
        755                 760                 765

Arg Asp Leu Leu Leu Ile Val Thr Arg Ile Val Glu Leu Leu Gly Arg
    770                 775                 780

Arg Gly Trp Glu Val Leu Lys Tyr Trp Trp Xaa Leu Leu Gln Tyr Trp
785                 790                 795                 800

Ser Gln Glu Leu Lys Asn Ser Ala Val Ser Leu Leu Asn Xaa Xaa Ala
                805                 810                 815

Xaa Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Xaa Gln Arg
            820                 825                 830

Ala Val Arg Ala Ile Leu His Ile Pro Arg Arg Ile Arg Gln Gly Leu
        835                 840                 845

Glu Arg Ala Leu Leu
    850
```